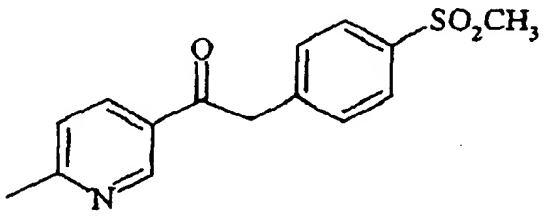
Patent Claims

1. Process for preparing 1-(6-methylpyridin-3-yl)-2-[(4-(methylsulphonyl)phenyl]ethanone of the formula



I

characterized in that
in the first step a) 2-methyl-5-ethylpyridine is converted at from 500°C to 700°C in the presence of a catalyst into 2-methyl-5-vinylpyridine,
in the second step b) the 2-methyl-5-vinylpyridine is converted with ozone and subsequent reductive work-up into 2-methylpyridine-5-carbaldehyde,
in the third step c) the 2-methylpyridine-5-carbaldehyde is converted with a dialkylamine and a CN source into the corresponding N,N-dialkylamino-(6-methyl-3-pyridyl)acetonitrile and finally
in the last step d) the N,N,-dialkylamino-(6-methyl-3-pyridyl)acetonitrile is reacted in the presence of a base with a 4-(methylsulphonyl)benzyl halide to give 1-(6-methylpyridin-3-yl)-2-[(4-(methylsulphonyl)phenyl]-ethanone.

2. Process according to Patent Claim 1, characterized in that the catalyst used in step a) is a silica, silica gel, iron oxide, zinc oxide, chromium oxide, copper chromite, magnesium oxide, potassium oxide, alumina or boron phosphate, alone or as a mixture, if appropriate applied to a support.

3. Process according to Patent Claim 1 or 2, characterized in that the reaction in step a) is carried out at a temperature of from 600°C to 700°C.

4. Process according to any of Patent Claims 1 to 3, characterized in that the reaction with ozone in

step b) is carried out in the presence of a mineral acid at a temperature of from -20°C to 0°C.

5. Process according to any of Patent Claims 1 to 4, characterized in that the reductive work-up in step b) is carried out with an alkali metal hydrogen sulphite at a temperature of from -20°C to 20°C.

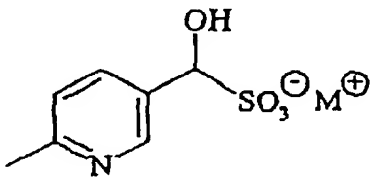
6. Process according to any of Patent Claims 1 to 5, characterized in that the CN compound used in step c) is an aqueous HCN solution or an aqueous solution of an alkali metal cyanide.

7. Process according to any of Patent Claims 1 to 6, characterized in that the reaction temperature in step c) is from 0°C to 30°C.

8. Process according to any of Patent Claims 1 to 7, characterized in that in step b) an adduct of the 2-methylpyridine-5-carbaldehyde with the alkali metal hydrogen sulphite is formed which is employed directly without isolation in step c).

9. Process according to any of Patent Claims 1 to 8, characterized in that the base used in step d) is either an aqueous alkali metal hydroxide solution together with a phase-transfer catalyst or an alkali metal alkoxide in the presence of an organic solvent.

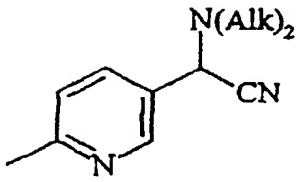
10. 1-Hydroxy-(6-methylpyridin-3-yl)methane-sulphonic acid salts of the general formula



II

in which M is an alkali metal.

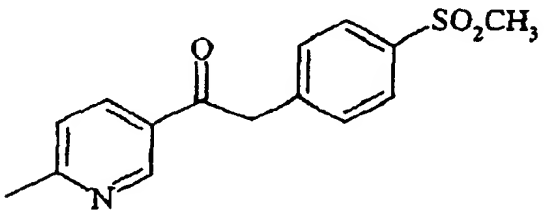
11. N,N-dialkylamino-(6-methyl-3-pyridyl)aceto-nitrile of the general formula



III

in which Alk is an alkyl group of from 1 to 4 carbon atoms.

12. 1-(6-methylpyridin-3-yl)-2-[(4-(methylsulphonyl)phenyl]ethanone of the formula



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